Early pandemic forecast for Taiwan M: multi-output M: multi-output M: repeated single-output (deaths + mobility) (deaths) (deaths) Prediction Prediction Prediction 1.5 1.5 Truth Truth Truth 1.0 1.0 0.5 0.5 0.5 0.0 0.0 0 8 10 12 8 10 12 10 12 Days since April 22 2020 Days since April 22 2020 Days since April 22 2020 B: Bi-LSTM (deaths) B: LSTM (deaths) B: GRU (deaths + mobility) Prediction Prediction Prediction 1.5 1.5 1.5 Truth Truth Truth 1.0 1.0 .0 0.5 0.5 0.5 0.0 0.0 10 12 8 10 12 8 10 12 8 6 6 6 Days since April 22 2020 Days since April 22 2020 Days since April 22 2020 B: ARIMA wavelet **B**: Persistence Prediction Prediction 1.5 1.5 Truth Truth

